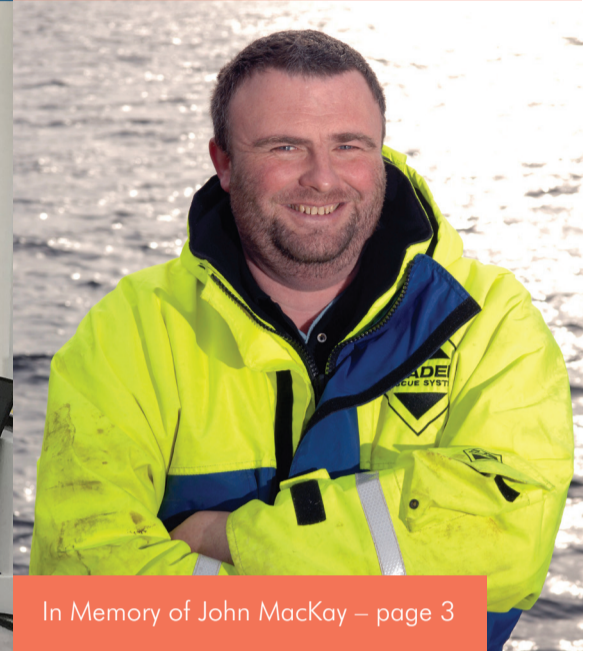


# THE SCOOP

**MOWI**<sup>®</sup>



Debra Brennan in the lab



In Memory of John MacKay – page 3

## Rising to environmental challenges

**In August our farmers were faced with two significant environmental challenges.**

At the start of August, warm temperatures and sunny skies led to plankton blooms in South Uist and by the end of the month Storm Ellen caused damage at Carradale. Both events caused extraordinary fish mortalities.

The Scoop has spoken to Debra Brennan, Fish Health Laboratory Manager, and Area Manager Duane Coetzer about what we can learn from these challenges and how Mowi is constantly investing in new technology, equipment, education and training to evolve our farming and meet these challenges.

### Developing our knowledge of plankton

Debra is based in our Blar Mhor laboratory and is an expert on plankton. She is on a mission to better understand the hundreds of different species of plankton and pass this knowledge on to our farmers so they can quickly identify plankton and take appropriate and swift action.

Debra explains: “Phytoplankton can be very localised, and everything is dependent on the environmental conditions including tide, water current, temperature, sunlight, PH, salinity and nutrient availability. Any fluctuations in these variables can cause what we term an ‘algal bloom’ which is essentially a rapid increase in algae. We do experience more algal blooms in the summer as sunlight and temperature increase.

“Water sampling is absolutely crucial to mitigate risk to salmon from plankton. Farms take water samples every day and this frequency is increased if farmers suspect there might be a problem.

“We are able to do both qualitative and quantitative analysis of plankton from water samples. For

qualitative, the farmers pull a plankton net through the water column and take a water sample. This water sample is highly concentrated and you see a lot of different species of plankton in that.

“Then for qualitative analysis, water samples are taken at different depths – 10m, 5m and 1m. This enables us to count how many algae phytoplankton are present per millilitre of water and what depth they are lying at. Understanding the depth is extremely important. If it is at 10m, so low down in the pens, then the fish can continue to feed above that level. But if the algae is sitting at 5m it can be risky to feed the fish.”

### Stulaigh, South Uist

At Stulaigh, salmon had been diagnosed with Cardiomyopathy syndrome (CMS), a condition which affects the heart and leaves the fish more vulnerable to challenges presented by prolonged exposure to harmful algae. Acting swiftly when mortality levels began to rise last month, the team increased the frequency of water sampling and sent the samples to Debra to confirm if harmful plankton was present. It was in the lab that Debra was able to compare the sample with one she was cultivating. This led her to the conclusion that the water from Stulaigh contained plankton that was similar in appearance and motility to pseudopedinella, a tiny nano plankton.

As a general rule, if more than 250 plankton cells per ml of this particular species are counted, it can present danger to fish. In the case of our Stulaigh farm, there were 5,000 cells per ml. Cells are extremely small - between 5 and 8 microns. A micron is 1,000th of a ml making identification very challenging. Pseudopedinella is about 8 microns and difficult to spot.

Debra continues: “The thing about plankton is we are dealing with tiny nano cells and not only do you need to know how to look for it, you also need to know what you’re looking for. That’s why I’ve got an inbox full of photos from our farmers across Scotland to help identify different species and a few cultured specimens that I’m taking round our sites as part of our ongoing education and training to help the farming team identify plankton so they can take appropriate action.”

### Dealing with plankton

Once identified, the first step is to stop feeding the fish and to switch on aeration systems in the pens. The bubbles disperse the phytoplankton blooms which then move away with natural tidal motion from the water. In the case of this particular type of phytoplankton at Stulaigh, pseudopedinella, it can produce toxins which then damage cells and in the worst case scenario a haemolytic substance enters the blood stream, gills become clogged with mucus as a response to the toxins and the salmon becomes hypoxic and dies through lack of oxygen. The damage can continue even when the algae die because when the bacteria begins to degrade, oxygen is used which reduces oxygen availability for our fish.

At Stulaigh, this most recent algal bloom has resulted in elevated fish mortality. Kris Laird, Regional Seawater Manager for the Western Isles, explains: “The team at Stulaigh did absolutely everything to safeguard the fish in our care, and are gutted to have watched some salmon die. In the last cycle, the survival rate at Stulaigh was 94% so this is a high performing site with an excellent team. Following identification of the pseudopedinella, swift and prudent action was taken and the salmon were harvested early.”

*This story is continued on page 2*





Carradale North farm moved 800 metres out of position after Storm Ellen, photo courtesy of Campbeltown Courier

### Storm Ellen

At the end of August, Storm Ellen hit the UK and Ireland with wind speeds of over 80 miles per hour at its peak. On August 20th the storm struck our farm at Carradale North causing the 10 circular pens, containing a total of 550,000 fish, to break from their seabed anchor lines and drift 800 metres away.

Duane Coetzer pays tribute to the team and contractors who worked round the clock to secure the site and save as many of the salmon as possible: "This was a difficult and dangerous situation and I'd like to thank everyone involved. We worked as quickly and safely as we could to secure the fish pens and safeguard our team and contractors until Storm Ellen had subsided.

"In less than three days we had managed to secure the farm in its original location and inspect all 10 pens. This whole recovery operation was completed without injury or incident."

### Scale of damage

Of the 10 pens, six were found to be structurally sound with fish in good condition. The remaining four pens were structurally compromised (two of which experienced torn netting), and the salmon contained within the four pens were either harvested (125,900), removed as mortality (30,616), or escaped (48,834). Following thorough inspection by dive teams, the root cause of the incident was breakage of mooring ropes that attach to the main system seabed anchors. The farm was installed five years ago according to the

*Marine Scotland A Technical Standard for Scottish Finfish Aquaculture*, and the infrastructure inspected three months ago. The rope, roughly twice the maximum strength required, has been sent to third-party testing facilities in Aberdeen.

### Rising to the challenge of extreme weather

"There is no doubt that globally we are experiencing more extreme weather. Of course, this poses challenges, but Scotland's salmon farmers have been finding solutions for over 50 years now. At Mowi, we always strive to be at the forefront and trial new technology and equipment. Whether it's newly identified plankton or a strong storm, all experiences and learnings will be quickly incorporated into our business for future planning," concludes Duane.

## New apprentices at Rosyth

**Seven new apprentices have joined Mowi Consumer Products UK at Rosyth. Four will work in engineering, one in operations support, one in planning and one in business administration.**

The Modern Apprentice roles have been created to support the growth at Rosyth which was accelerated by consumer behaviour during lockdown. In the last issue of The Scoop, we spoke to Bertil Buysse, Managing Director Mowi Consumer Products UK, about the major expansion and planned investment in smart technology at Rosyth. This month, we spoke to Learning and Development Manager, Donald Waring, to find out about career opportunities at Rosyth and the long-term vision for apprentices.

Donald explains: "At the start of lockdown, there was huge demand for our products in the supermarkets. Initially, it was like our Christmas season and we found that many people were trying our salmon for the first time and liking it, which has led to repeat buying and continued growth. This in turn has led us to create new Modern Apprenticeship roles at Rosyth and we see apprentices as an important part of managing the growth and also ensuring the business develops its talent for a successful future."

Some apprentices have already started with others due to join the team September 8th. We spoke to our newest recruits to find out how they are finding working at Mowi so far and their hopes for the future.

### Meet Abby Paton

Abby is 24 and has joined as an Apprentice Training Development Administrator. A student of graphic design, she also worked part-time for Tesco Mobile. Speaking about her experience so far, Abby said: "It has been great! Everyone is very friendly. There are a lot of new things to learn which I love because I am getting lots of wonderful support from my colleagues. I hope to learn and grow my skills so that I can take on more responsibilities. I would really love to develop my career here at Mowi."



### Meet Erin Davies

Erin is 19 and has joined as an Apprentice Production Planner. She left school in 2018 after completing sixth year. For Erin, she knew what she wanted to do, she just needed the opportunity: "I knew I wanted to do planning but when I left school there were no opportunities at that time. So, I went to work for Eurochange working in foreign currency, but this confirmed that wasn't the career for me. During the recent Covid-19 lockdown I had time to evaluate what I really wanted to do and fortunately this opportunity with Mowi came up, so I decided to do an apprenticeship in planning.

"I'm really excited and I hope to complete my two-year apprenticeship to become a qualified production planner. I want to become a valued team member and I look forward to future employment opportunities at Mowi."





# John MacKay (02/04/1966 – 9/08/2020)

**It is with great sadness that we announce our friend and colleague John MacKay passed away late evening Sunday 9th August. John was diagnosed with cancer a few short weeks prior to his passing and his death comes as a great shock to us all.**

John was born on 2nd April 1966 in Connel. He is survived by his wife Mo, his mother Marie, sons Scott and Stuart, daughters Paula and Leanne, and his brother Alistair, our farm manager at Torridon.

John spent all his working life at Marine Harvest / Mowi. Starting his career on the 12th July 1982 on a temporary basis at Torridon fish farm, his managers were quick to see his potential, so he was offered a full time farm technician position on 1st February 1983. On 1st January 1985 John was promoted to assistant manager at our Diabeg site, before again gaining a promotion to farm manager at Loch Ewe in November 1989. On 1st November 2003 he moved to manage Static Point (Little Loch Broom). From 1st January 2006 John had been the much respected farm manager at the Duich farm in the village of Letterfern.

In recent times John was proud to have accepted the opportunity to mentor our newly appointed farm manager at Loch Ewe - Scott Forder. John had also been assisting his area manager Hugh MacKinnon by advising many of our young managers over the past few years, offering his support and passing on his extensive knowledge to the next generation of

Mowi managers. His love and pride of fish farming has and will inspire future generations of salmon farmers – they have been helped by the best.

John was very well respected not only within the Marine Harvest / Mowi family but to all that had the pleasure of visiting his farm. He hosted many important customer visits and they were always warmly greeted by his calm, pleasant and helpful character.

When John wasn't working, he would enjoy his time with grandchildren, walking his dogs and playing his accordion. He was a very accomplished musician and attended many accordion club meetings.

"John was one of the very best: an excellent farm manager, a great teacher, and he had a wonderful sense of humour. All of us who worked closely with John will remember the nicknames he had for most people – always very apt and never offensive. Above all he was a very good friend." – Hugh MacKinnon.

John was laid to rest in the company of friends and family on 18th August at Annat Cemetery, Torridon.



Showcased alongside other holders of the Royal Warrant at the Coronation Festival at Buckingham Palace in 2013



Proudly displaying the Royal Crest

## Celebrating 30 years of holding the Royal Warrant

**2020 marks our 30th anniversary as proud holders of a Royal Warrant of Appointment. Mowi, then trading as Marine Harvest Scotland, was appointed to the Royal Warrant in 1990.**

The Royal Warrant of Appointment was established in the 15th century by the Lord Chamberlain. It meant that approved merchants who had supplied specific goods and services to the Royal Household for at least five years had the right to use the Royal Arms in connection with their business. Holders of the Royal Warrant were also allowed to use the Royal Arms on their product and packaging and to display the designated crest on their premises.

This tradition has continued up to the present day and is as prized and valuable to holders of the Royal Warrant as it was 600 years ago. The process for awarding Royal Warrants of Appointment is managed by the Royal Household Warrants committee. Royal Warrants are currently granted by the Queen, the Duke of Edinburgh and the Prince of Wales. Today, the distinction of Appointment is granted to around 800 companies.

Commenting on the achievement of holding the Royal Warrant for 30 years, Georgina Wright, head of sales, said: "We are immensely proud to have held the Royal Warrant of Appointment for 30 years. It is an honour that Mowi Scotland is the only supplier of fresh salmon to Her Majesty. The Royal Warrant, clear from the Royal Crest on our boxes of salmon that are sold all over the world, is recognised and held in high regard globally and lends even greater provenance to the Mowi story."

The Royal Arms is displayed proudly on each of Mowi Scotland's 25 kilogram fish boxes that depart our processing plant in Fort William. More than two and a half million of these boxes, which are now recyclable, are shipped worldwide every year bearing this seal of Royal Appointment. Georgina continued: "We know that when our customers see the Royal Crest, they are assured of the quality of our salmon and also of our standards in terms of the environment and sustainability."

For those who would like to know the exact wording of the Royal Warrant of Appointment, it says:

"This is to certify that by Command of Her Majesty The Queen, Mowi Scotland Limited T/A Marine Harvest Scotland"... "has been appointed into the place and quality of Supplier of Fresh Scottish Salmon to Her Majesty to hold the said place until this Royal Warrant shall be withdrawn or otherwise revoked."



# Staff News



## Pawel scales new heights

Congratulations to Pawel Cymbalista, a technician at Mallaig Harvest Station, who completed the Charlie Ramsay Round in 23h 17min.

This gruelling task challenges participants to complete 24 Munros in Glen Nevis in 24 hours. Starting at the Glen Nevis Youth Hostel at 10pm on 7th July, Pawel ran a total of 93km and ascended 8,686m – close to Mt. Everest – before completing his challenge before 10pm on 8th July.

Pawel is only the second Polish person and one of 179 people worldwide to complete the challenge within 24 hours. Not only that but he has logged the 97th fastest time to date – well done, Pawel!



## Celeb spotting in Mallaig

Our harvest manager, John Angus Gillies, bumped into some celebs in Mallaig of all places! Stars including Freddie Flintoff and Shaun Wallace, better known as the Dark Destroyer from The Chase, were there filming the new ITV show Don't Rock the Boat.



# Meet Olly Childs

## What do you do at Mowi?

I am a Farm Technician at Loch Ness.

## What did you do before joining Mowi?

I was a Vaccination Team Leader at Salmovac.

## What do you like most about your job?

The variety of tasks on the farm, I can be sampling fish one day then fixing machinery the next. I particularly enjoy getting involved in the various projects at the site and I'm quite proud of the groundworks and "Mowi" sign I designed last year.

## What do you do in your spare time?

I enjoy cooking, music and long walks.

## What is your favourite film?

The Original - Blues Brothers.

## What is your favourite salmon dish?

Salmon feta and spinach fishcakes.



# Outward Bound Takes It Inward

**We are pleased to continue our support to Outward Bound. With Covid-19 guidelines requiring a change in programming this year, the 'In School Adventures' initiative now brings the outdoors into the classroom.**

The first schools to participate in the programme are within Lochaber, where many of our colleagues and their families live.

The Outward Bound Trust is a charity that provides adventurous outdoor experiences, immersing young people in nature and helping them develop key skills such as resilience, self-confidence and positivity. Mowi has supported this charity for the last decade.

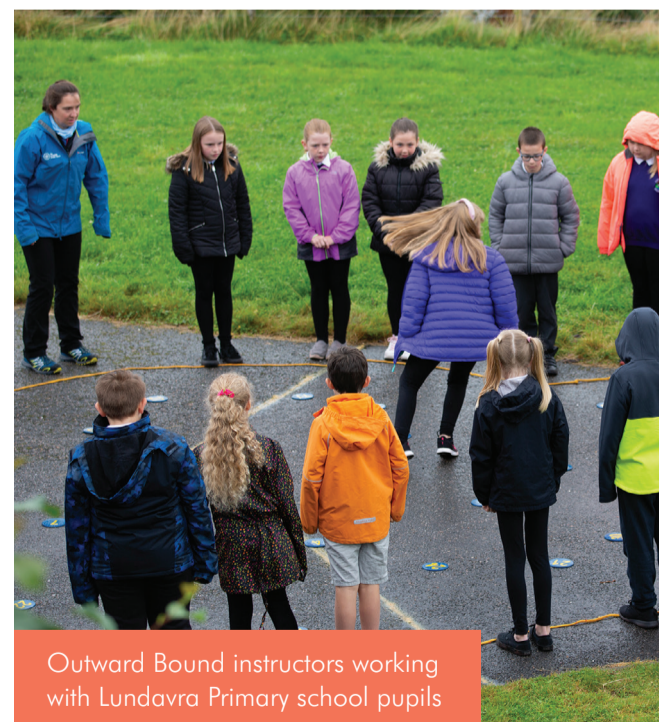
Instructors from the Outward Bound Trust work in schools, colleges and with employers and youth groups to help young people believe in themselves.

Before the Coronavirus pandemic, more than 130 schools from all over Scotland would visit Outward Bound's Loch Eil centre for a week-long outdoor learning and adventure residential each year. However, this is no longer possible as overnight residentials are not permitted within the Covid-19 guidelines.

Instead, the Outward Bound Trust is bringing outdoor adventures to Scottish classrooms this autumn as Martin Davidson, Director of Scotland and Innovation at Outward Bound, explains: "At Outward Bound we never sit back and say we can't. It's just not in our DNA. If pupils are not able to come on residentials at Outward Bound this autumn, then we will go to them! Our mission is to help young people see what they are truly capable of, to believe in themselves, to be more than they think. And right now, this is needed more than ever."

Speaking about the partnership, Ben Hadfield, Chief Operating Officer for Farming Scotland and Ireland at Mowi, said: "Mowi is a proud supporter of Outward Bound. We want all children to reach their fullest potential and hope that through this additional donation, the dedicated Outward Bound instructors will be able to help children in these

schools to not only catch up on the last five months, but thrive in education, learning and in their mental health and wellbeing. Right now, young people need as much support as possible and the In School Adventures will help pupils who might not otherwise get this opportunity."



Outward Bound instructors working with Lundavra Primary school pupils